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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,813	03/30/2001	Randolph E. Treur	LAM2P247	6643

25920 7590 09/18/2003

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EXAMINER
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STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 09/18/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/823,813

Applicant(s)

TREUR, RANDOLPH E.

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-31 is/are allowed.
- 6) ☒ Claim(s) 17-19, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17, 18, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 63-253627 (Japan'627) in view of either Japan 11-24282 (Japan'282) or Japan 9-293658 (Japan'658).

Re claim 17, Japan'627 is cited disclosing a wafer preparation module comprising wafer engaging rollers being oriented at an angle between 0° to 90° and designed to spin the wafer that differs from the claim only in the recitation of the enclosure. Japan'282 and Japan'658 are each cited disclosing the enclosure. It therefore would have been obvious to one having ordinary skill in the art to modify the device of Japan'627 to include an enclosure as taught by either Japan'282 or Japan'658, for the purpose of preventing contamination of the wafer during preparation. Re claims 18, 19, Japan'282 and Japan'658 disclose the preparation includes one of rinsing, cleaning, drying scrubbing and megasonic fluid application and a dispenser. Re claim 22, Japan'627 discloses the drive roller.

3. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied Japan'627 in view of either Japan'282 or Japan'658 as applied to claim 17 above, and further in view of EPO 11238713 (EPO'713).

Claim 21 defines over the applied prior art only in the recitation of the megasonic nozzle. EPO'713 is cited disclosing in a wafer preparation module, a megasonic nozzle.

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It therefore would have been obvious to one having ordinary skill in the art to modify the device of Japan'627, to include a megasonic nozzle as taught by EPO'713, for the purpose of intensifying the wafer preparation.

4. Claims 17-19, 21 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over either Japan 7-335599 (Japan'599), Japan 5-3184 (Japan'184), Ito et al., EPO'713, Tomita et al., Sawada et al. or Maekawa et al. in view of Japan'627.

Re claim 17, Japan'599, Japan'184, Ito, EPO'713, Tomita et al., Sawada et al., Maekawa et al. are all cited disclosing a wafer preparation module containing rollers designed to spin the wafer during preparation that differs from the claim only in the recitation of the rollers being orientated at an angle between 0° and 90°. Japan'627 is cited disclosing the rollers orientated at the angle as claimed. It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Japan'599, Japan'184, Ito, EPO'713, Tomita, Sawada or Maekawa, to have the rollers orientated an angle between 0° and 90° as taught by Japan'267, for the purpose on improving the manufacture yield of the wafer devices. Re claims 18 and 19, the primary references disclose the preparation including one of rinsing, cleaning, drying, scrubbing and megasonic fluid application and a dispenser. Re claim 21, EPO'713 discloses the megasonic nozzle. Re claim 22, the primary reference discloses the drive roller.

5. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 23-31 are allowed.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Japan'292Reynolds, note the wafer treating means.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANKIE L. STINSON** whose telephone number is (703) 308-0661. The examiner can normally be reached during the first week of the pay-period M-F from 5:30 a.m. to 3:00 p.m. and during the second week of the pay-period from Tu-Th second from 5:30 a.m. to 3:00 p.m. and on Fri. from 5:30 a.m. to 2:00 p.m. Alternating Mondays off.

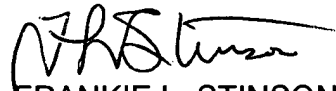
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The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (NON-FINAL REJECTION STATUS) and (703) 872-9311 (AFTER-FINAL REJECTION STATUS).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Any inquiry for missing parts of this Office Action (copies of references, pages, forms etc.), contact Office Manager Ms. Sandra Sewell (703) 308-0661.

fls

  
FRANKIE L. STINSON  
Primary Examiner  
Art Unit 1746